



Attorney Docket No. 5308-248

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Saxler et al. Group Art Unit: 2811
Serial No.: 10/617,843 Examiner: To Be Assigned
Filed: July 11, 2003 Confirmation No.: 7985
For: NITRIDE-BASED TRANSISTORS AND METHODS OF FABRICATION THEREOF
USING NON-ETCHED CONTACT RECESSES

Date: February 11, 2004

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

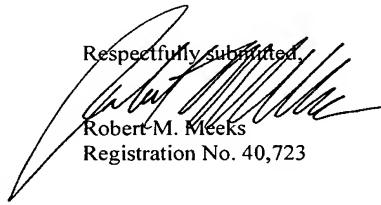
THIRD INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Sir:

Attached is a list of documents on Form PTO-1449, together with a copy of any listed foreign patent document and/or non-patent literature. A copy of any listed U.S. patent and/or U.S. patent application publication is not provided herewith in accordance with the waiver by the U.S. Patent and Trademark Office of requirements under 37 C.F.R. § 1.98(a)(2)(i) for all U.S. national patent applications filed after June 30, 2003 and for all international applications that have entered the national stage under 35 USC § 371 after June 30, 2003.

It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. § 1.56 and Section 609 of the MPEP. No fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

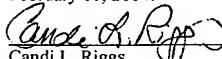
Respectfully submitted,


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Candi L. Riggs

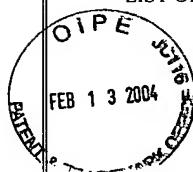
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LIST OF DOCUMENTS CITED BY APPLICANT

(Use several sheets if necessary)



Applicants: Adam William Saxler et al.

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 Group
 2811

U. S. PATENTS & PATENT APPLICATION PUBLICATIONS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	4,424,525	1/3/84	Mimura	357	23	
	2.	4,471,366	9/11/84	Delagebeaudeuf et al.	357	16	
	3.	4,727,403	2/23/88	Hilda et al.	357	22	
	4.	4,788,156	11/98	Stoneham et al.	438	167	
	5.	5,946,547	8/7/90	Palmour et al.	156	643	
	6.	5,192,987	3/9/93	Khan et al.	257	183.1	
	7.	5,200,022	4/6/93	Kong et al.	156	612	
	8.	5,210,051	5/11/93	Carter, Jr.	437	107	
	9.	5,292,501	3/8/94	Degenhardt et al.	424	49	
	10.	5,296,395	3/22/94	Khan et al.	437	40	
	11.	Re. 35,861	2/14/95	Davis et al.	437	100	
	12.	5,393,993	2/28/95	Edmond et al.	257	77	
	13.	5,523,589	6/4/96	Edmond et al.	257	77	
	14.	5,701,019	12/23/97	Matsumoto et al.	257	192	
	15.	5,705,827	1/6/98	Baba et al.	257	46	
	16.	5,885,860	3/99	Weitzel et al.	438	179	
	17.	6,064,082	5/16/00	Kawai et al.	257	192	
	18.	6,177,685	1/23/01	Teraguchi et al.	257	20	
	19.	6,218,680	4/17/01	Carter, Jr. et al.	257	77	
	20.	6,639,255	10/03	Inoue et al.	257	194	
	21.	2001/0015446	8/23/01	Inoue et al.	257	192	

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation Yes No
	22.	JP02002016087	1/18/02	Japan			
	23.	JP02001230407	8/24/01	Japan			

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*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

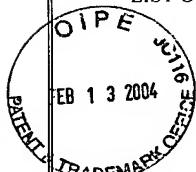
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24.	WO03/049193	6/12/03	PCT			
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

25.	Chu et al., "GaN materials for high power microwave amplifiers," <i>Mat Res. Soc. Symp. Proc.</i> , Vol. 512 (1998)
26.	Eastman et al., "Undoped AlGaN/GaN HEMTs for Microwave Power Amplification," <i>IEEE Transactions on Electron Devices</i> . Vol. 48, No. 3, March 2001, p. 479-85.
27.	G. Sullivan et al., "High Power 10-GHz Operation of AlGaN HFETs in Insulating SiC," <i>IEEE Electron Device Letters</i> , Vol. 19, No. 6, p. 198, June 1998
28.	Gaska et al., "Electron transport in AlGaN-GaN heterostructures grown on GH-SiC substrates," <i>Applied Physics Letters</i> , Vol. 72, No. 6, February 9, 1998, pp. 707-709
29.	Gaska et al., "High-Temperature Performance of AlGaN/GaN HFETs on SiC Substrates," <i>IEEE Electron Device Letters</i> . Vol. 18, No. 1, p. 492, October 1997
30.	Gelmont et al., "Monte Carlo simulation of electron transport in gallium nitride," <i>J. Appl. Phys.</i> , Vol. 74, No. 3, August 1, 1993, pp. 1818-1821
31.	Heikman et al., "Growth of Fe doped semi-insulating GaN by metalorganic chemical vapor deposition," <i>Applied Physics Letters</i> , Vol. 81, No. 3, July 15, 2002, pp. 439-441
32.	International Search Report, PCT/US02/09398, August 20, 2002
33.	P.M. Asbeck et al., "Piezoelectric charge densities in AlGaN/GaN HFETs," <i>Electronics Letters</i> , Vol. 33., No. 14, pp. 1230-1231, 1997
34.	Ping et al., "DC and Microwave Performance of High-Current AlGaN/GaN Heterostructure Field Effect Transistors Grown on P-Type SiC Substrates," <i>IEEE Electron Letters</i> . Vol. 19, No. 2, p. 54, February 1998
35.	Sheppard et al, "Improved 10-GHz Operation of GaN/AlGaN HEMTs on Silicon Carbide," <i>Materials Science Forum</i> . Vols. 338-342, pp. 1643-6. (2000)
36.	Sheppard et al., "High Power Demonstration at 10 GHz with GaN/AlGaN HEMT Hybrid Amplifiers." Presented at the 58 th DRC, Denver, CO June 2000.
37.	Sheppard et al., U.S. Patent Application Serial No. 09/096,967 entitled, <i>Nitride Based Transistors on Semi-Insulating Silicon Carbide Substrates</i> , filed June 12, 1998.
38.	Wu et al., "High Al-Content AlGaN/GaN MODFET's for Ultrahigh Performance," <i>IEEE Electron Device Letters</i> , Vol. 19, No. 2, p. 50, February 1998

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